12419000 SPOKANE RIVER NEAR POST FALLS, ID

LOCATION.--Lat 47°42'11", long 116°58'37", in SW¼SW¼SW¼ sec.4, T.50 N., R.5 W., Kootenai County, Hydrologic Unit 17010305, on right bank, 1 mi downstream from powerplant of Washington Water Power Co., 1.5 mi southwest of Post Falls, and at mile 100.7.

DRAINAGE AREA.--3,840 mi^2, approximately, of which about 122 mi^2 in the vicinity of Hayden Lake is noncontributing to this station.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1912 to current year (prior to January 1913, monthly discharge only, published in WSP 870 and 1736). Prior to October 1949, published as "at Post Falls."

GAGE.--Water-stage recorder. Datum of gage is 2,050 ft, referred to originally accepted elevation of 2,157.40 ft for the U.S. Geological Survey bench mark in southeast corner of Idaho First National Bank Building (see WSP 882). Gage datum is 2,047.00 ft above sea level. Jan. 1, 1913, to Nov. 21, 1920, nonrecording gage, and Nov. 22, 1920, to Sept. 15, 1934, recording gage 0.6 mi upstream. From Sept. 16, 1934, to Nov. 15, 1949, recording gage 0.8 mi upstream. From Nov. 16, 1949, at present site. Datum of all gages prior to Sept. 30, 1964, 50 ft lower.

REMARKS.--No estimated daily discharges. Records good except for daily discharges December to July, which are fair. Flow regulated by dam at Post Falls and affected by storage in Coeur d'Alene Lake (sta 12415500).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,100 ft^3/s, when recorder was not operating, Dec. 25, 1933, (determined from unpublished records collected by Washington Water Power Co. for station at Liberty Bridge); minimum, 65 ft^3/s July 25, 30, 1973; minimum gage height, 4.68 ft, July 20, 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,300 ft^3/s Apr. 22, gage height, 20.67 ft; minimum daily, 258 ft^3/s Aug. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2120	2140	6170	6190	3570	7870	11800	22000	11400	2810	752	273
2	2110	2140	6200	6020	4130	8130	11700	21300	11500	2870	749	301
3	2110	2140	6140	5600	5160	8270	11800	21100	11300	3560	745	341
4	2100	2140	6050	5450	6290	8610	12300	21000	10500	3510	743	367
5	2100	2140	6050	5290	6560	9080	13000	21000	9350	3480	743	735
6	2110	2130	6100	5020	7150	9680	14000	20900	8880	3480	742	1030
7	2110	2550	6250	4690	7110	10300	15000	20500	8350	2900	742	1040
8	2100	2790	6310	4600	7150	10800	15100	19900	7510	2520	741	1040
9	2100	2780	6330	4600	7170	10600	15000	19300	7630	2500	739	1040
10	2100	2800	6300	4320	7190	10500	14800	18700	7650	2510	741	1040
11	2100	2800	6260	4300	7300	10500	14900	18200	7660	2490	740	1120
12	2110	2770	6230	4300	7350	9920	15300	17900	7680	2280	743	1570
13	2090	2790	6240	4170	7370	9220	16300	17500	8460	1810	742	1560
14	2080	2800	6280	4040	7290	10800	18200	16900	9000	1640	744	1560
15	1650	2800	6320	4030	7320	10800	21400	16300	8300	1310	744	1560
16	1420	2820	6550	4070	7210	10700	24700	15700	8060	1310	652	1560
17	1860	2800	7610	4080	7100	10700	26800	15500	8020	1340	426	1560
18	2090	2930	8460	4090	6790	10600	27600	15200	8020	1370	323	1550
19	2090	3020	8810	4080	6650	10400	28200	15300	7690	1180	297	1550
20	2090	3020	9920	4250	6290	10200	28500	15500	6590	1050	297	1560
21	1630	3000	10600	4330	6100	10100	28600	15500	6110	919	296	1560
22	1410	3010	10700	4330	6070	9890	28700	15500	5680	749	292	1650
23	1420	3010	10500	4140	6100	9930	28700	15300	4820	749	289	1730
24	1780	3100	10100	4050	6370	10600	28700	15400	4350	1170	283	1730
25	1970	3120	9630	4040	6640	10900	27900	15000	4330	1470	283	1730
26	1990	3430	9130	4050	6710	11100	27000	13800	3920	1470	280	1720
27	1610	4400	8410	3980	6770	11200	25700	13400	3580	1470	271	1720
28	1710	5060	7820	3900	7080	11300	24600	13300	3660	1140	271	1870
29	2040	5070	7230	3800	7480	11600	23600	13200	3740	775	265	2030
30	2150	5770	6920	3700	---	11800	22700	12500	3190	772	260	2030
31	2150	---	6530	3610	---	11900	---	11900	---	758	258	---
TOTAL	60500	91270	232150	137120	191470	318000	622600	524500	216930	57362	16193	40127
MEAN	1952	3042	7489	4423	6602	10260	20750	16920	7231	1850	522	1338
MAX	2150	5770	10700	6190	7480	11900	28700	22000	11500	3560	752	2030
MIN	1410	2130	6050	3610	3570	7870	11700	11900	3190	749	258	273
AC-FT	120000	181000	460500	272000	379800	630800	1235000	1040000	430300	113800	32120	79590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2000, BY WATER YEAR (WY)

MEAN	1735	2892	4936	5242	6307	8252	14460	17580	9663	2106	945	1182
MAX	5460	13130	23660	24930	23280	25440	26050	34930	26710	10720	2133	1849
(WY)	1928	1928	1934	1934	1996	1972	1943	1997	1974	1916	1917	1985
MIN	782	627	784	996	1025	1751	3558	5141	1584	851	185	188
(WY)	1964	1936	1936	1931	1929	1929	1977	1992	1926	1994	1958	1949

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1913 - 2000	
ANNUAL TOTAL	2829651		2508222			
ANNUAL MEAN	7752		6853		6246	
HIGHEST ANNUAL MEAN					11600	1974
LOWEST ANNUAL MEAN					2143	1977
HIGHEST DAILY MEAN	23500	May 31	28700	Apr 22	49800	Dec 25 1933
LOWEST DAILY MEAN	453	Sep 3	258	Aug 31	67	Jul 24 1973
ANNUAL SEVEN-DAY MINIMUM	501	Sep 2	268	Aug 26	108	Aug 10 1966
ANNUAL RUNOFF (AC-FT)	5613000		4975000		4525000	
10 PERCENT EXCEEDS	17100		15500		17300	
50 PERCENT EXCEEDS	6310		4640		3020	
90 PERCENT EXCEEDS	1420		749		909	

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973-1981, July 1989 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May to September 1998, May to September 1999 (discontinued).
SPECIFIC CONDUCTANCE: February 1999 to current year.

INSTRUMENTATION.--Temperature recording data logger.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 27.1 °C July 29, 1998.
SPECIFIC CONDUCTANCE: Maximum recorded daily mean, 57 microsiemens/cm Aug 30 to Sept. 4, 2000; minimum recorded daily mean, 42 microsiemens/cm May 6-8, June 14-15. 2000.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 26.0 °C Aug. 9.
SPECIFIC CONDUCTANCE: Maximum recorded daily mean, 57 microsiemens/cm Aug 30 to Sept. 4; minimum recorded daily mean, 42 microsiemens/cm May 6-8, June 14-15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
NOV										
15...	0950	2790	46	7.5	8.0	10.5	--	--	--	--
JAN										
03...	1005	5990	47	7.5	0.0	5.0	--	--	--	--
FEB										
17...	1430	7120	49	7.0	1.0	3.5	--	--	--	--
MAR										
28...	1520	11300	56	7.5	7.5	3.8	.6	12.9	105	K2
MAY										
11...	0940	18300	46	7.1	3.5	9.5	.7	12.1	114	K2
JUN										
12...	1015	7700	45	7.4	12.0	14.3	.4	8.3	87	K8
JUL										
05...	1200	3470	47	6.9	22.0	19.0	.4	10.5	121	K13
AUG										
09...	1540	739	52	7.4	34.0	25.7	.7	--	--	56
SEP										
06...	1000	1040	58	7.4	14.0	18.7	.5	8.9	101	K14

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC WATER UNFLTRD FET FIELD MG/L AS HCO3 (00440)	ANC UNFLTRD CARB FET FIELD MG/L AS CO3 (00445)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
NOV										
15...	--	19	5.1	1.5	1.6	--	--	--	--	<.3
JAN										
03...	--	20	5.3	1.6	--	--	--	--	--	--
FEB										
17...	--	20	5.2	1.6	--	--	--	--	--	--
MAR										
28...	K4	21	5.5	1.7	--	--	24	0	19	--
MAY										
11...	K2	--	--	--	--	--	--	--	--	--
JUN										
12...	24	--	--	--	--	--	--	--	--	--
JUL										
05...	84	--	--	--	--	--	--	--	--	--
AUG										
09...	30	--	--	--	--	--	--	--	--	--
SEP										
06...	47	21	5.6	1.6	2.4	.8	25	0	20	4.1

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	NITRO-GEN NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
NOV										
15...	<.3	<.1	9.0	.047	<.002	.1	.017	.007	<1	<1
JAN										
03...	--	--	--	.066	.021	E.08	.011	.004	<1	<1
FEB										
17...	--	--	--	.049	.006	.2	.008	.004	<1	<1
MAR										
28...	--	--	--	.077	<.002	E.09	.009	.002	<1	<1
MAY										
11...	--	--	--	.021	.007	.2	<.008	.003	--	--
JUN										
12...	--	--	--	.020	.006	.1	E.007	<.001	--	--
JUL										
05...	--	--	--	.038	<.002	E.1	E.004	.002	--	--
AUG										
09...	--	--	--	.10	.009	.2	E.006	<.001	--	--
SEP										
06...	1.5	<.1	8.6	.18	.013	.1	.009	.001	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV										
15...	21.3	<10	<1	<1.0	3.2	1	51	47.8	--	--
JAN										
03...	40.8	E5	<1	1.0	4.7	1	70	63.9	--	--
FEB										
17...	36.3	E6	<1	<1	4.1	<1	74	74.8	--	--
MAR										
28...	93.2	19	<1	1.4	4.4	1	81	77.4	2	61
MAY										
11...	--	--	--	--	--	--	--	--	2	99
JUN										
12...	--	--	--	--	--	--	--	--	2	42
JUL										
05...	--	--	--	--	--	--	--	--	1	9.4
AUG										
09...	--	--	--	--	--	--	--	--	1	2.0
SEP										
06...	--	--	--	--	--	--	--	--	2	5.6

E Positive detection but below stated detection limit.
K Results based on counts outside ideal colony range.

12419000 SPOKANE RIVER NEAR POST FALLS, ID--Continued

WATER TEMPERATURE, DEGREES CELSIUS, MAY TO SEPTEMBER 2000

DAY	MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	14.5	13.0	20.5	19.5	25.0	24.0	21.0	20.0
2	---	---	14.5	14.0	20.5	20.0	25.5	24.0	20.0	19.5
3	---	---	15.5	14.5	20.0	19.5	25.5	24.5	20.5	19.0
4	9.5	9.5	16.0	15.0	19.5	18.5	25.5	24.5	20.0	19.0
5	9.5	9.0	16.5	15.5	18.5	18.0	25.5	24.5	19.5	18.5
6	10.0	9.0	16.5	16.5	19.0	18.5	25.5	24.5	19.0	18.5
7	10.5	9.5	16.5	16.0	19.0	18.5	25.5	24.5	18.5	18.0
8	10.5	9.5	16.5	15.0	19.5	18.5	25.5	24.5	18.0	17.5
9	10.5	10.0	15.5	15.0	20.0	19.0	26.0	24.5	17.5	17.0
10	10.5	9.5	15.5	14.5	20.0	19.0	25.5	24.5	17.0	17.0
11	10.0	9.5	14.5	14.0	21.0	20.0	25.0	24.0	17.5	17.0
12	10.0	9.5	14.5	14.5	21.0	20.0	25.0	23.5	17.5	17.0
13	11.0	9.5	15.0	14.5	21.5	20.5	24.5	23.5	18.0	17.0
14	11.0	10.0	15.0	15.0	22.0	21.0	24.0	23.0	18.5	17.5
15	12.0	10.5	15.5	15.0	21.0	20.0	24.0	23.0	18.5	18.0
16	12.0	10.5	15.5	15.0	22.0	20.5	24.0	22.5	19.0	18.5
17	12.0	10.5	16.0	15.5	22.5	20.5	24.0	22.0	19.0	18.5
18	11.5	10.5	16.0	16.0	23.0	21.5	23.5	22.0	19.0	18.5
19	11.0	10.5	16.5	16.0	22.5	21.5	22.5	21.5	19.0	18.5
20	12.0	11.0	16.5	16.0	23.0	21.0	23.0	21.0	18.5	18.0
21	12.5	11.5	17.0	16.5	---	---	23.0	21.0	18.0	17.0
22	13.5	12.0	17.5	17.0	---	---	23.0	21.0	17.0	15.5
23	13.5	12.5	17.5	17.0	---	---	23.5	21.0	15.5	15.0
24	13.5	12.5	17.5	17.0	---	---	23.5	21.5	15.0	14.5
25	14.0	13.0	17.5	17.0	24.0	22.5	23.5	21.5	15.5	14.5
26	13.5	13.0	18.5	17.0	24.0	22.5	23.0	21.0	15.5	15.0
27	14.0	13.0	19.0	17.5	23.5	22.5	22.5	21.0	15.5	15.0
28	14.0	13.0	19.0	18.0	---	---	22.5	20.5	15.5	15.0
29	14.0	13.0	19.5	18.5	---	---	22.0	20.0	15.5	15.0
30	14.0	13.5	19.5	19.0	---	---	22.5	20.5	15.5	15.5
31	14.0	13.0	---	---	---	---	21.5	20.0	---	---
MONTH	---	---	19.5	13.0	---	---	26.0	20.0	21.0	14.5

SPECIFIC CONDUCTANCE, MICROSIEMENS AT 25 DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	44	44	48	57
2	---	---	---	---	---	---	---	---	43	44	49	57
3	---	---	---	---	---	---	---	---	43	44	49	57
4	---	---	---	---	---	---	---	44	43	44	50	57
5	---	---	---	---	---	---	---	44	43	44	50	55
6	---	---	---	---	---	---	---	42	43	44	50	54
7	---	---	---	---	---	---	---	42	43	44	50	55
8	---	---	---	---	---	---	---	42	43	44	51	55
9	---	---	---	---	---	---	---	43	43	45	51	54
10	---	---	---	---	---	---	---	43	43	45	51	52
11	---	---	---	---	---	---	---	43	43	45	51	51
12	---	---	---	---	---	---	---	43	43	45	51	50
13	---	---	---	---	---	---	---	43	43	45	51	51
14	---	---	---	---	---	---	---	43	42	46	51	51
15	---	---	---	---	---	---	---	43	42	49	51	50
16	---	---	---	---	---	---	---	43	43	50	51	50
17	---	---	---	---	---	---	---	43	43	50	53	50
18	---	---	---	---	---	---	---	43	43	48	54	50
19	---	---	---	---	---	---	---	44	43	48	54	50
20	---	---	---	---	---	---	---	43	43	50	54	50
21	---	---	---	---	---	---	---	43	43	---	55	50
22	---	---	---	---	---	---	---	43	43	---	56	50
23	---	---	---	---	---	---	---	43	43	---	55	50
24	---	---	---	---	---	---	---	43	43	---	55	50
25	---	---	---	---	---	---	---	43	43	48	55	50
26	---	---	---	---	---	---	---	43	43	48	55	50
27	---	---	---	---	---	---	---	43	43	48	56	50
28	---	---	---	---	---	---	---	43	44	---	56	50
29	---	---	---	---	---	---	---	43	44	---	56	50
30	---	---	---	---	---	---	---	43	44	---	57	50
31	---	---	---	---	---	---	---	43	---	---	57	---
MEAN	---	---	---	---	---	---	---	---	43	---	53	52
MAX	---	---	---	---	---	---	---	---	44	---	57	57
MIN	---	---	---	---	---	---	---	---	42	---	48	50